

1994

## The effectiveness of an intervention program to improve performance of low-achieving students on the Literacy Passport Test

Harriet Elizabeth Bauer  
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**Bauer, Harriet Elizabeth, Ed.D.**

**The College of William and Mary, 1994**

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THE EFFECTIVENESS OF AN INTERVENTION PROGRAM  
TO IMPROVE PERFORMANCE OF LOW ACHIEVING  
STUDENTS ON THE LITERACY PASSPORT TEST

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A Dissertation  
Presented To  
The Faculty of the School of Education  
The College of William and Mary in Virginia

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

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by  
Harriet E. Bauer  
May 1994

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THE EFFECTIVENESS OF AN INTERVENTION PROGRAM  
TO IMPROVE PERFORMANCE OF LOW ACHIEVING  
STUDENTS ON THE LITERACY PASSPORT TEST


by

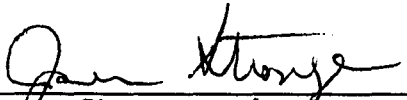
Harriet E. Bauer

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Approved May 1994 by

  
Robert J. Hanny, Ph. D.  
Chair of Doctoral Committee

  
Thomas Ward, Ph. D.

  
James Stronge, Ph. D.

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## DEDICATION

This work is dedicated to:

my husband, Joseph L. Bauer, who unselfishly  
devoted many, many hours typing and retyping my papers,

my sister, Barbara Ann Reph, who had maintained  
confidence in me and encouraged me when I needed it most,

my children, Joseph, Michael, and Mark Bauer, and  
Antoinette Bauer Craig who always thought that Mom was  
Super-woman.



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THE EFFECTIVENESS OF AN INTERVENTION PROGRAM  
TO IMPROVE PERFORMANCE OF LOW ACHIEVING  
STUDENTS ON THE LITERACY PASSPORT TEST

ABSTRACT

The purpose of this study was to determine whether there was a difference in achievement scores and pass rates on Virginia's Literacy Passport Test between students who volunteered for and received additional instruction, students who volunteered for but did not receive the instruction, and students who neither volunteered for nor received interventional instruction in a program for rising sixth graders identified as potentially at-risk of initially failing the LPT.

It was hypothesized that 1) volunteers' scores of those who attended the summer program would show higher achievement and pass rates than either the scores of the volunteers without additional instruction and non-volunteers and 2) volunteer scores and pass rates of students who had not entered the five week program but expressed a desire to do so would show higher achievement than the non-volunteers.

Students' LPT scores were measured and analyzed.

Those who received treatment did not produce mean scores nor pass rates significantly higher than those who did not receive treatment.

Further study is needed to determine whether summer intervention programs are effective for those students who have taken the LPT and have failed any portion of it.

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**THE EFFECTIVENESS OF AN INTERVENTION PROGRAM  
TO IMPROVE PERFORMANCE OF LOW ACHIEVING STUDENTS  
ON THE LITERACY PASSPORT TEST**



## Chapter 1

### The Problem

#### Introduction

Minimal competency testing for high school graduation and grade-to-grade promotion, inspired by historical and political issues, has become a major movement in American education. The majority of states has mandated competency testing, either through legislation or through action by state boards of education, in the belief that the testing of essential skills and competencies will help raise academic standards and increase educational achievement (Haney & Madaus, 1978).

The Kansas State Department of Education, and other state departments of education, designed tests which focused on those minimum academic skills. Studies have shown that this type of test result, based on selected minimum competencies, is valuable as an indicator of student achievement (Kansas, 1985).

It was not until the mid 1980's that Virginia joined other states in mandating a minimum competency test.

This test, known as the Literacy Passport Test (LPT), was enacted in 1988 by the General Assembly in the Standards of Quality (SOQ). The SOQ stipulate that students are required to pass the three components of the LPT to be eligible to be classified as ninth graders and earn high school credits toward a standard diploma (Spagnolo, 1993). Students who do not pass one or more of the literacy tests are to be provided additional instruction in the area(s) not passed (Division, 1993).

Since July, 1988, regulations of the State Board of Education embodied in the Standards for Accrediting Public Schools in Virginia (SOA) require school divisions to create an alternative program for each student who has not passed all three portions of the LPT by the end of grade eight. Local school divisions have latitude in determining appropriate alternative programs for each student who is categorized as ungraded. To account for the number, placement, and progress of these students, school divisions must keep track of them through the use of the Communications Automated Transition System (CATS), or some other means until all three components of the LPT have been passed (Spagnolo, 1992).

Additionally, documentation concerning the actions taken to continue to prepare students to pass the LPT must be kept in the cumulative files of these students.

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Those who do not successfully complete all three portions of the LPT at the end of grade six must have a Literacy Development Plan (LDP) prepared for them. An option that has been suggested by the Virginia Department of Education, is to increase the amount and quality of time for learning, but not a pull-out program not directly tied to the learning objective of the students' regular classroom (Spagnolo, 1992). One practice suggested to satisfy the requirement was through a summer school experience which would enable student participation in supplemental literacy developmental activities.

Beginning with the 1992-93 school year, school districts were required to assess all students at age nine, and no later than the middle of fourth grade, in order to identify individual student strengths and weaknesses in reading comprehension, writing, and mathematics. To assist in accomplishing this objective, the Virginia Department of Education made available pre-tests or pre-LPTS which were to aid in determining the proficiency of each student with respect to content areas (Spagnolo, 1992).

Prior to the state's new accreditation standards and availability of the pre-tests, the Hampton City School Division in Virginia determined student mastery of basic skills in reading, writing, and mathematics through

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teacher assessment of student performance, with the exception of students in grades 4, 6, and 11. Students in those grades were given standardized tests which provided additional accountability of student achievement. Although teacher assessment and standardized tests were considered adequate measures of performance, upon analysis the district realized that it neither had a thorough plan for identifying students in need of additional instruction to meet minimum standards nor did it have a comprehensive remediation plan in place. To correct this apparent deficiency, the school division proceeded to develop both a plan for identifying students who apparently lacked minimum skills and a comprehensive remediation plan (Cannaday, 1989).

In designing a comprehensive remediation plan the school division studied and analyzed various instructional interventions. Research conducted by Cannaday (1989) compared three types of instructional approaches, namely: computer assisted instruction, cooperative learning, and teacher directed instruction. In a five week summer intervention program all were found to be equally effective, with no significant differences in improving student achievement on the LPT.

The school division continued to use these instructional methods in its summer remediation program

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for students who have been identified as possibly at-risk of failing the LPT, or who had already failed at least one section of it. This summer program was staffed by teachers in the school district who applied for a position, were interviewed by a committee, and selected based on their knowledge of subject matter and teaching experience, and willingness to instruct students using one of the three previously mentioned instructional strategies.

Students who were in the program attended on a volunteer basis, although regular attendance was required once the student had applied for and been accepted into the program. Too many absences warranted being dropped from the program. All students identified categorically as at risk of failing the LPT and those who had failed any portion of the LPT were given the opportunity to attend the sessions but could decline. Free bus service was provided for all students who wished to attend; however, since resources were limited, students were accepted on a first-come, first-served basis dependent upon the date they returned their completed contract to their school (See Appendix B). This situation created three categories of students: (1) students who volunteered for and received additional instruction, (2) students who volunteered for but were unable to receive

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additional instruction, and (3) non-volunteers who did not receive additional instruction during the summer.

#### Statement of the Problem

The purposes of this study were to compare pass rates and mean difference performance on the LPT of students or groups of students who volunteered for and received instruction during a five week summer remediation program; those students who volunteered for, but did not receive interventional instruction; and those non-volunteers who received no instruction.

#### Research Question

Specifically, the study was designed to address the following research question:

1. Will a summer intervention program enhance the skills of students at risk of failing the LPT, and increase their chances of passing all portions of this norm-referenced multiple choice test?

Hypothesis 1: There will be a significant difference in the pass rate on the reading, writing, and mathematics sections of the LPT between the group who volunteered for and received additional summer instruction, the group who volunteered for, but did not receive additional instruction; and the group who did not seek nor receive additional instruction.

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Hypothesis 2: There will be a significant difference in the mean performance in reading, writing, and mathematics sections of the LPT between the group who volunteered for and received additional summer instruction; the group who volunteered for, but did not receive additional instruction; and the group who did not seek nor receive additional instruction.

Theoretical Rational and Significance of the Study

The Hampton City School District has implemented a variety of remedial approaches throughout the last several years. Until recently, little systematic evaluation of these efforts has been conducted concerning the efficacy of intervention programs for improving student achievement. Increasing instructional time is a strategy that may allow students to achieve desired outcomes of education. Summer school programs offer an especially viable option for meeting the needs of at-risk students by providing additional time for remediation and reinforcement of basic skills (Resource, 1988).

One criticism education systems within the United States receive from educational reformers is the length of the traditional school year. Other countries offer up to 240 days of school. In comparison reformers say that our current school year does not allow sufficient time for students to master basic skills.

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Another criticism is that American public education is not providing an adequate amount of instruction to students in order that upon graduation they will be competitive in the global marketplace. Research on time and learning yields mixed findings. Time is required to master skills, but is only one factor influencing learning. Different amounts of time to meet expected outcomes vary from student to student; however, those who are considered at risk of educational failure demonstrate the greatest potential for gains in learning as a result of time spent in instruction (Department, 1993). Studies on achievement of those students attending schools in a year-round education program indicate academic gains while others indicate no significant difference as measured by standardized tests (Peltier, 1991). Other studies indicate there is more continuous learning with year-round education and less learning loss during the summer compared to the traditional school calendar (Stover, 1989).

Research conducted by Quartarola (1984) indicated that increasing time in school will not automatically increase student achievement nor raise standardized test scores. He found, instead, that quality of instruction bore a significant relationship to achievement.

Based on sound educational research, local educators

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are currently considering a variety of reform efforts to improve student achievement. Some of which are: increasing time allocated for instruction, optional additional instructional days for enrichment and remediation, and increased availability of instructional resources for students and families (Department, 1993).

One of the goals of this study is to determine whether a summer intervention program will enhance student achievement and thus be useful in educational improvement. If it is substantiated that students who receive additional instruction demonstrate a greater propensity for achievement on the Literacy Passport Test, this information can be generalized to succeeding rising sixth graders in Virginia and suggest to other school districts a way to enable possible at-risk students to succeed at one of the state's educational goals. The information will also add to the body of knowledge concerning the effect of short-term summer programs on at-risk students, whether motivation is a factor in passing the LPT, and the impact of reinforced learning on students with minimal skills.

#### Operational Definitions

The following are definitions of key terms to be used in this study.

At-Risk Students. Those students who are identified

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by scoring on the bottom quartile of the ITBS and whom teachers identify as at risk of dropping out of school prior to high school graduation because of various circumstances.

Computer Assisted Instruction. An instructional strategy which involves teachers and students using microcomputers as tools with specific software programs.

Cooperative Learning. An instructional approach which assigns students to work in small groups to (1) learn the assigned material individually, and (2) help each member of the group to learn the assigned material.

Degrees of Reading Power (DRP). Units of ratings of textbook difficulty that are derived from an analysis of materials in the texts at the median readability level for each grade.

Intervention. A short term summer remediation program utilizing computer-assisted instruction, cooperative learning, and teacher directed instruction intended to assist potential at-risk students in achieving a passing score on the LPT.

Iowa Test of Basic Skills (ITBS). A standardized test used as one of the criterion to identify students potentially at risk of failing the LPT.

Literacy Development Plan (LDP). Individualized

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instructional program for students who do not pass the LPT by the end of eighth grade.

Literacy Passport Test (LPT). Tests developed by the Virginia Department of Education to determine whether students have the requisite skills in reading, writing, and mathematics to function successfully in their academic endeavors at the high school level.

Rising Sixth Graders. Students who have completed fifth grade but have not yet begun sixth grade.

Teacher Directed Instruction. An instructional strategy requiring the primary responsibility for delivery of information by the teacher. Students are taught in a large group with individuals being solely responsible for their own learning.

Volunteers. Students who are willing to participate in a program through their own consent or through parental consent in their stead.

#### Limitations of the Study

The following constraints will limit the interpretation of the results of this study:

1. The population is limited to one urban school district in southeastern Virginia.
2. The study cannot control for the fact that students received some instruction between the start of the school year and

the time the Literacy Passport Tests were administered.

3. The data used to operationalize student achievement was limited to the spring 1993 scores for the Literacy Passport Test.
4. Students were able to receive instruction in only one subject area during the intervention treatment, although they may have failed or have been identified as at-risk in more than one area.

#### Major Assumption

The following comprises the major underlying assumption contained in the proposed study:

Students who volunteer for and receive additional instruction will demonstrate a greater degree of success by achieving a passing score in a particular discipline on the LPT than those who do not attend a summer intervention program.

#### Summary

Many people believe that requiring minimum competency tests will help raise educational standards. Since some students have difficulty in passing these tests, school districts have devised various alternative programs to aid these students. This study examined

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whether a five week summer intervention program was effective for rising sixth graders by enabling them to pass the LPT.

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## Chapter 2

### Review of Related Literature

#### Introduction

Related literature and research was reviewed to support and contribute to this study. The literature was organized from three perspectives. First, aspects of literacy with implications for current literacy testing were arranged to provide an historical framework. Second, literature was presented which relates to current concepts of effective instructional techniques to enhance learning. Third, relevant literature was included which identified those factors which relate to the assessment of achievement and gains in achievement.

#### Rationale

The Standards of Quality for Public Schools in Virginia (SOQ) require that students pass a Literacy Passport Test in mathematics, reading, and writing. This test, enacted in 1988, mandated that all students in Grade 6 have the test administered to them beginning with the 1989-90 school year. Thereafter, all students in succeeding grades have any portion of the test

administered to them which they have not passed (Standards, 1988).

Prior to the enactment of this mandate and in response to the Virginia Governor's Commission on Excellence in Education task force plan for educational initiatives which convened in 1986, the Hampton City School District organized a steering committee to develop and implement a plan to comply with the proposed mandates set forth by the General Assembly. One of these mandates requires remedial programs for students who score in the lower quartile on the Virginia State Assessment Program (VSAP) and those who fail the literacy tests administered in the sixth grade. To pass the literacy requirement, students at the middle school level must demonstrate a minimum mastery of basic skills in reading, writing, and mathematics before being classified as high school students and thus able to earn high school credits. Local school divisions are responsible for providing the remediation programs.

With the adoption of these new accreditation standards, Hampton's steering committee, under the direction of the superintendent, began by agreeing on a definition of remediation and defining a remedial program (Cannaday, 1989). A comprehensive K-12 remediation program with both regular and summer components was

developed by this committee, submitted to the Hampton City School Board in February, 1988, approved by the Board, and was then implemented. A few months later, in April of 1988, a resource document to assist local school divisions in developing a remediation program was distributed by Dr. S. John Davis, State Superintendent of Public Instruction, (Virginia Department of Education, 1988). This document prescribed alternative teaching strategies for instructing students as a component of an effective remediation program.

Three strategies chosen by Hampton City School District as the instructional foundation for the summer remediation program beginning in 1989 were initiated. These strategies were (a) direct teaching, (b) computer assisted instruction, and (c) cooperative learning. Cannaday's (1989) study comparing the effectiveness of these three instructional techniques on improving math performance of low achieving students found no statistical difference among the three techniques.

A further aspect to be considered concerning the effectiveness of a summer program was whether intervention measures will enable at-risk students to successfully pass the LPT. To this end this study was designed to determine whether identified rising sixth graders considered at risk, who volunteer to attend a

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summer program, have a higher pass rate and mean scores than identified at-risk students who do not attend a summer remediation program. Those students who pass all three portions of the LPT are considered sufficiently literate and capable of functioning on an acceptable academic level in high school.

### Literacy as Process

Literacy is a cognitive as well as a social and linguistic process. A review of the literature indicates that literacy has historically been our talisman, the aptitude test of general knowledge. As such, it is expected to boost employment, ensure intellectual growth, and promote civility according to Hull (1989).

Hiebert (1991) identified two types of literacy; critical literacy, the capacity to employ language as a tool for thinking and communicating, and basic literacy which allows the individual to follow directions. However, Scribner and Cale's study of the Vai people, a West African tribe with a population of approximately 1200 in 1981 led them to the conclusion that, "Literacy is not simply knowing how to read and write a particular script, but applying this knowledge for specific purposes in specific contexts of use" (Hull, 1989, p. 110).

The Vai acquire literacy without formal schooling. Although many are illiterate, some are literate in

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English or Arabic, and some are literate in Vai writing. They use English in national politics and economic institutions and Arabic in their religious practices. They use Vai script for personal or local communication and record keeping. Through their study Scribner and Cole demonstrated that literacy is associated with improved performance on certain cognitive tasks, but not with improvement in overall mental abilities.

Cook-Gumperz (1986) agrees that literacy is not just the simple ability to read and write, but by possessing and performing the skills socially approved and approvable talents are exercised. That is to say, literacy is a socially constructed complex phenomenon. It plays a major role in improvement of the quality of life for individuals, social groups, and a whole society.

From a psychological perspective it is a multifaceted set of instrumental skills involving cognitive processes whose acquisition is both the purpose and product of schooling. Which is why, as suggested by Hiebert (1991), there are tugs of war in the classroom and in American society concerning literacy which is fundamentally interest and value-laden, both of which are political in nature.

Literacy instruction within the learning domain encompasses how children learn to read and write. It can

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also be considered as the act of thinking and way of thinking. From a broader perspective literacy is the ability to think and reason within a particular society. Hiebert states, "Literacy should be seen as learning to decode and accommodate multiple levels of meaning through a complex system of social relations" (p. 119). He further states that anthropologists know that in non-school education children almost never learn directly from true experts. Instead, they learn from slightly older peers or adults and acquire knowledge through social and procedural information as a hidden curriculum. What young children know, especially concerning language, is learned as part of the interactional communicative routines of groups with whom they live and associate. However, in order for any learning to be effective, research in cognitive development psychology indicates that the child must contribute to the learning process (Resnick, 1989).

#### Literacy Passport Test

In the United States the major yardstick for measuring student learning is standardized achievement tests. These tests measure the performance of students from diverse backgrounds but possess potential pitfalls that all assessments pose for students and school districts since annual gains in basic and advanced skills

in reading and mathematics serve as the basic indicators of school progress (Karweit, 1993). In many states and communities the tests are high-stakes affairs whose outcomes affect not only prestige and recognition . . . , but also quality of life and jobs" (Resnick, 1989, p. 209). "Mandated testing imposed by states and local districts is a vast enterprise in the United States, touching the lives of students and teachers in virtually every classroom in the nation". The majority of states has mandated competency testing, either through legislation or through action by school boards of education, in the belief that testing of essential skills and competencies will help raise academic standards and increase educational achievement (Haney and Madaus, 1978).

In 1988, the Virginia General Assembly enacted Standards of Quality that require students to pass literacy tests to be eligible to be promoted to the ninth grade and to earn a standard diploma. The purpose of the Virginia Literacy Testing program in reading comprehension, writing, and mathematics is to determine whether students have satisfactorily achieved competence in the K-6 language arts and mathematics Standards of Learning (SOL) objectives on which the tests are based (Levinrider, 1993). A goal of the program is to have

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students academically prepared upon entering secondary school so that they will be able to experience academic success (Division, 1993). The LPT serves as the "gate guard" or "break point" prohibiting students from earning high school credit toward a diploma until they have successfully passed all three sections of the test.

The LPT consists of assessments in reading, writing, and mathematics. The reading portion is a Degrees of Reading Power test developed for the Virginia Department of Education by Touchstone Applied Science Associates, Inc. (TASA). The writing portion is a prompt developed by the Virginia Department of Education. The mathematics portion was also developed by the Virginia Department of Education (Virginia, 1992).

Beginning in the 1993-94 school year the LPT was administered twice a year instead of annually after a budget amendment was approved during a General Assembly session (Hansen, 1993). The Virginia State Department of Education has decided to support the Literacy Passport effort with technology, namely micro-computers, and has invested over ten million dollars. Presently the Commonwealth is developing plans and ideas through the State Department of Education to better assist teachers in effectively utilizing the software (Flanagan, 1991).

Although the LPT will be administered twice during

the school year, statistics relating to Virginia's educational programs will not be published until the annual Outcome Accountability Report on Public Schools is publicized.

#### Outcome Accountability

In May, 1993, the Virginia Department of Education released its second Outcome Accountability Project Report on Public Schools in Virginia. The report addressed how students scored on standardized tests which focus on the cognitive, the number of students taking classes in algebra and foreign languages in preparation for college, dropout rates, and number of overage elementary students.

According to the report almost sixty percent of Virginia's fourth, eighth, and eleventh graders scored above the 50th percentile on standardized tests in the 1991-92 school year. However, the percentage of sixth graders passing the LPT fell from 72% in 1990-91 to 64% in 1991-92. State officials contribute the decline to a blunder on the writing portion of the test citing that the criteria for scoring was mistakenly set too low in the 1990-91 test year as the reason for the decline in 1991-92 scores. State officials expect to see each succeeding class who take the LPT doing better than the previous class (Rodrigues, 1993).

In August, 1993, the Virginia Department of

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Education released the latest statistics showing 64.8% of sixth graders passing all three parts of the LPT. There was also a slight increase of passing scores for seventh and eighth graders taking the test (Shawgo, 1993). Based on the current statistics, Flanagan (1993) suggests that the LPT has possibly improved education for the disadvantaged and minorities more than any program produced by the Commonwealth.

After the LPT had been administered for a few years, a situation arose which required further guidance from the State Board of Education. Some students were in eighth grade anticipating promotion to ninth grade, although they had not successfully passed all three portions of the LPT. Because of the LPT requirements these students were not eligible to be classified as ninth grade students. Therefore, accommodations had to be made for them until such time as they passed the entire LPT. To prevent the reoccurrence of this situation, requirements were then placed on school divisions to create Literacy Development Plans (LDP) for students who fail any portion of the LPT (Spagnolo, 1992).

#### Literacy Development Plan

Accreditation standards require school divisions in Virginia to create LDPs for students who, by the end of

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sixth grade, had failed one or more parts of the LPT in 1992 (Tomey, 1993). Regulations of the State Board of Education embodied in the Standards for Accrediting Public Schools in Virginia also require school divisions to create alternative programs and prepare LDPs for each student who has not earned the passport by passing all sections of the LPT by the end of grade eight. The LDP must contain an instructional plan specifying the instructional strategies and delivery methods which will be used to help the student acquire the necessary skills and provide an assurance statement to the Virginia Department of Education that LDPs have been implemented (Draper, 1993). Both students and parents must receive adequate notice of the test requirement, the content of the test, and consequences of not passing the test. Local school divisions must maintain a record of notification within each student's Category 1 file beginning in the fourth grade (Spagnolo, 1992). In May, 1993, local school divisions were given latitude to determine appropriate alternative programs for each student who had failed one or more parts of the LPT by the end of sixth grade.

Alternative learning arrangements and alternative teaching approaches are recommended since alternative choices often encourage the individual student to

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progress toward desired curriculum goals. Developmental differences in the physical, social, emotional, and intellectual aspects of the middle school student impact on appropriate instruction; therefore, curriculum articulation which minimizes gaps and overlaps in both program and learning expectations is important (NASSP, 1993).

Hampton City School's Supervisory Staff chose not only alternative learning arrangements for those students potentially at risk of failing or who had failed the LPTs, but also alternative teaching approaches. One of the alternative learning arrangements is a summer intervention remediation program coupled with the alternative teaching approaches of utilizing microcomputer technology and cooperative learning during instruction.

#### Instructional Techniques

Literacy activities do not operate in a vacuum. All instructional contexts are embedded in a larger social and institutional setting. Literacy instruction should help students to think more deeply and broadly about content as they engage in purposeful activities. Hiebert (1991) stated that children, regardless of age or level of achievement, can be taught effective reasoning and the skills to learn from text. To accomplish this, teachers

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need to identify, diagnose, and change courses of action that are harmful or ineffective and, instead, expose students to good instructional practices within a supportive environment using instructional strategies to serve as a bridge into literacy.

A major shift currently facing public schools is how to prepare all students to function in a social system that requires increasingly sophisticated uses of literacy (Hiebert, 1991). Research strongly suggested that teaching, especially in math, is most successful when the instruction is adapted to children's thinking processes and natural solution strategies (Kaplan, 1989). Low achieving students need diverse opportunities to practice and apply skills to varied contexts with corrective feedback. Low achievers also need sustained, explicit strategy instruction with strong metacognitive components according to Jones (1987). He believes that the performance of low achieving students is modifiable by providing appropriate instructional experiences.

In a comparative study by Cannaday (1989) on the relative effectiveness of computer assisted instruction, cooperative learning, and teacher directed instruction on improving performance of low-achieving students, he found that there was no significant difference among these three instructional strategies in regard to student

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performance on math concepts, problems, computations, or total math. However, the results of a study by Copley (1991) strongly suggest that microcomputers can promote improvement of math skills. She also concluded that a combination of direct teacher instruction with planned use of the microcomputer in a cooperative learning environment is an effective arena for students to develop mathematical skills.

A study by the National Commission on Excellence in Education found that the time allocated and used effectively for instruction varied widely among American teachers and schools (Bell, 1984). One of the recommendations made by this commission to enhance the use of time was to train teachers in the efficient management of instruction. Hafner (1993) concurred, citing that it is probable that instructional variables may be more important than previously recognized.

Hiebert (1991) found that teachers often unknowingly exclude or reduce the time minority students participate in literacy activities because features of their discourse do not conform to teacher's expectations or match their speaking styles. In order for instruction to be effective there must be reciprocal interaction between the teacher and student with mutual problem solving. Practitioners must make substantive choices

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about what and how to teach in the classroom.

Though a general relationship between teacher behavior and student achievement has been established, some researchers note that educators still lack specific empirical information concerning which methods are effective in helping students learn. Although socio-economic status still is believed to account for a substantial portion of the variation in explaining achievement, instructional variables may be more important than previously recognized (Hafner, 1993). He contends, though, that it is unlikely that any one teaching practice will, by itself, lead to higher achievement.

Braddock (1993) states that in order for students to be successful at learning tasks they must be provided with regular intermediate rewards and recognition in order to be motivated to continue to work hard at these tasks. Flanagan (1991) asserts that there is no consistent body of research evidence to support the popular belief that there is a significant positive relationship between pupil attitudes toward mathematics and pupil achievement in mathematics. He further states that research evidence suggests student motivation and self concept are necessary for achievement implying that students must want to achieve and be willing to learn.

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Therefore, the focus of any instruction should be on student learning conditions and student learning outcomes. The expectation is that students will learn if presented with the right learning opportunities.

#### Purpose of Learning

If we assume that learning is thinking, that is, using prior knowledge and specific strategies to understand ideas in text as a whole, or elements of a problem as a whole, we apply this to problem solving as well. Jones (1987) also stated that learning as organizing knowledge occurs in phases, yet is recursive and is influenced by development. Whereas, Flanagan (1991) attributes the effective retention of learning to purpose. He cites the level of classroom learning where attentional capabilities are limited for everyone as an example of self concept and attitude affecting the learning process and ability to remember.

Short term memory studies show that all people must juggle the complexities of experience by combining complex realities into 5-7 distinctive entities (Hiebert, 1991); however, long term memory depends on the acquisition of organizational structure and strategies providing an unlimited capacity to store attended experiences. Hiebert (1991) asserts that storing information is easy; retrieving it is the challenge. The

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rate and amount of learning is affected by the student's personal interest, the opportunity for thinking, and previous knowledge.

Wakefield (1993) reports that in 1975 Karmiloff-Smith and Inhelder found there are three lines of access to constructing new knowledge. First, the perceptual line connects what is new to what we have seen before. Second, an action line connects to what we have done before. Third, there is a conceptual line to what we have thought before.

Strong et al (1990), have classified four categories of learning dilemmas. They are: (1) retention; making memories, (2) motivation and cooperation; making choices, (3) meaning and comprehension; making sense, and (4) transfer and application; making use. After analysis of their own and Wolfe's research studies, as well as the Marzano model and the Strong and Brock model, Strong, et al, reached a conclusion concerning techniques to enhance learning, "There is no one correct way of doing things" (Strong, 1990, p. 28). Hafner (1993) suggests that it is probable that process outcomes that measure level of performance may provide more guidance than content outcomes on the development of research models for mathematics teaching and learning.

Statistics on test performance show a gap in

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achievement between middle and lower class students increases as a function of grade or class level. According to Gainey (1993), the bottom one-third of our young people are more likely to fail than the bottom one-third of any nation with which we usually compare ourselves.

#### National Literacy Assessment

The International Association for the Evaluation of Educational Achievement (IEA) began conducting cross-national studies in the 1960s. Of the 19 countries studied, the United States ranked close to the middle with its students consistently ranking low in assessments of mathematics and science (Levine, 1993). Mathematics is viewed widely as a "gatekeeper" subject that helps determine later success in scientific and technical studies. It also lends itself to international comparisons because its content is relatively standard across cultures. Although high ability students performed well in nearly all participating countries, eighth graders in the United States scored close to the overall average in arithmetic and algebra, and close to the bottom in geometry and measurement. (Levine, 1993).

During the late 1960s, when the IEA began conducting their studies, Ralph Tyler and John Goodlad proposed the original idea for the National Assessment of Educational

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Progress (NAEP) in the belief that the nation lacked vital information concerning how well its educational enterprise was performing and how well schools were succeeding in their work. They suggested the focus be on assessing programs in education in broad groupings such as geographic regions, gender, and race.

The actual assessment began in 1969-70 with samples defined by age. The ages were nine, 13, 17, and 26-35. Assessment has continued with authorization and funding from the United States Congress. Since then achievement levels, on the whole, are at about the same general level they were in 1970 (Wolf, 1993).

Several years later the IEA and the NAEP produced the First International Assessment of Educational Progress (IAEP) study which compared mathematics and science scores among 13 year olds who were relatively representative of the national population in six countries. United States' students scored substantially below those in the five other countries of Canada, Ireland, Korea, Spain, and the United Kingdom.

Analysis of the data found that, unlike practices in most other nations, the mathematics curriculum in the United States is dramatically differentiated. Our eighth graders tend to be sorted into tracks that stress algebra and other advanced topics for high achieving students and

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simple arithmetic for low achievers. Thus, many students with low or middle achievement have little opportunity to proceed beyond basic skills. Therefore, it is suggested that both curriculum and instruction be upgraded throughout the educational system (Levine, 1993).

Achievement in United States' schools has improved during the past few decades according to Levine (1993), particularly when account is taken of increases in the enrollment of previously low-achieving minority students from low-status families. These improvements may be attributable to the positive effects of compensatory education and school desegregation, introduction of minimum competency testing, and other efforts to bring about educational reform. Trends, as indicated in the second IAEP, show gains in the performance for both nine year olds and 13 year olds. The 95th percentiles of almost all nations are virtually identical for both science and mathematics when these subjects are assessed (Bracey, 1993).

#### Assessment Issues

Measurement and evaluation represent important components in an effectively functioning educational system. An assessment process, whether paper and pencil instruments, performance assessment, or direct personal communication with students should include the full range

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of expectations for the school. Levine (1993) argues that evaluation requires educators to compare student performance to a particular standard to determine how the student measures up. Some decisions require the comparison of student performance to a pre-set standard of performance, especially when educators seek to diagnose student needs. With the development of assessment policies at district and building levels, the use of sound assessment and specific assertive action is enabled.

Authentic assessment, as argued by Darling-Hammond (1993), is necessary because a growing number of jobs in our information economy require highly developed intellectual skills and technological training. Because "low-skill" jobs require technical training and flexibility, students preparing to enter the work force need the skills and training offered in high school. But to enter high school in Virginia they must pass the LPTs. Those who are lacking the pre-requisite skills are labeled at-risk.

#### At-risk Population

Descriptors of at-risk students are those with poor grades, low performance on basic skills tests, and below grade performance in the classroom. Some family factors which contribute to the condition are low social or

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economic status families, unstable family conditions, low educational level of parents, limited English proficiency of the student, and being a member of a minority culture. Personal factors which influence at-risk students are poor health, substance abuse, alcohol use, pregnancy, and a low self-concept (Ruff, 1993). These children often are placed in lower groups at the outset of schooling and build up handicaps that become difficult to overcome (Cook-Gumperz, 1986).

Ethnographic work shows that all students do not experience the same literacy-related activities at home (Hiebert, 1991). Disadvantaged early adolescents experience greater dilemmas than other students in their simultaneous needs to feel success and competence. They need to be accepted by other students without being labeled or ridiculed for slower rates of learning. "If feelings of competence and acceptance are not gained in school activities, early adolescent disadvantaged students are more likely to seek self-affirmation in nonacademic domains or to take non-school paths en route to dropping out" (Braddock, 1993, p. 155). Braddock goes on to say that disadvantaged students are likely to be below average in prior preparation for learning tasks because poor families do not have the resources to build the foundations of academic reading and skills compared

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with college educated, middle class families. Educators mistakenly believe that reading is based upon formal skills, when in reality it is based on cultural knowledge which children from poor income families lack (Hiebert, 1991). However, he asserts that this deficiency can be overcome.

A study of 220 at-risk middle schoolers found that these students valued an education and wanted to succeed in school, but their specific needs were neither identified nor met. They expressed a need for more individual assistance and personal contact than most of their peers and desired personal and warm relationships with both teachers and peers. They felt a need for specific subject matter assistance to overcome basic skill deficiencies and assure success in content area classes. The study also found that unless at-risk students receive intensive, on-going, individualized assistance, their problems persist and intensify throughout their school career. This study suggests two major requirements of at-risk students which are a relevant curriculum and a nurturing environment (Ruff, 1993).

In our modern industrial technological society, formal education, culture, and literacy play critical roles. Unfortunately children who grow up in low-income

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families or with undereducated parents are often unable to pull out of this cycle of low achievement (U.S., 1993). These at-risk youths have trouble dealing with the traditional classroom with its lack of variety. They exhibit behavioral problems, have poor self-esteem, and quickly become bored (Perna, 1992).

Research has found that retention exacerbates the problem. When these students are retained the drop-out rate increases to fifty percent. If students are retained more than once, the drop-out rate increases to ninety percent (Ruff, 1993). Ruff contends these students exhibit poor academic performance for several reasons. They come to school lacking basic skills prerequisite to learning. They have emotional and/or family problems which interfere with the ability to concentrate on school tasks. And success in school is not an individual, family, or cultural priority.

The key to success, as stated by Cole (1992), involves modifying the conditions under which students are asked to learn. His experiences have shown that traditional summer remedial programs have limited success for these students. He claims instead, that the conditions which work for at-risk students is that they (1) sign a contract, (2) schedule four hours a day for six weeks in which they can come to school any time, (3)

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agree to complete assigned tasks at a proficient rate, (4) log thirty hours of attendance within six weeks, and (5) use teachers as a resource of knowledge. He has found that with the aforementioned conditions there is a trend for stronger classroom performance and is a step toward keeping at-risk students in school, graduating, and gaining productive employment. Bloom (1976) concurs with the idea of teaching students in ways appropriate to their needs and providing help to assist them in overcoming their learning difficulties so they can succeed.

#### Intervention

Educators now believe that schools should focus on prevention rather than remediation. "The tragedy of the 'teach the best and forget the rest' philosophy is that we communicate to millions of students every year, especially low income and minority students, that we do not believe they have what it takes to learn" (Gainey, 1993, p. 18).

Studies have shown that we tend to learn only that which we study and is proportionate to the time spent studying (Finn, 1991). Therefore, the importance of realistic opportunities for success at learning tasks should be consistent with the needs of the learner. From a developmental viewpoint, Braddock (1993) asserts that

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students should become engaged with schoolwork that appears well connected to future educational and vocational goals they see for themselves, with clear connections of current course work to the prerequisites.

Today, in Virginia, students are required to demonstrate knowledge they have acquired through a measure identified as the LPT. Standard 1.C of the 1992 SOQ states that "Local school boards shall also develop and implement programs of prevention, intervention, or remediation for students who are educationally at risk including, but not limited to, those . . . who do not pass the literacy test prescribed by the Board of Education. Division superintendents may require such students to take special programs of prevention, intervention, or remediation which may include attendance in public summer school sessions" (Interpretive No. 2, 1992).

#### Remediation Programs

Students who are not successful at specific learning tasks require additional time for instruction. While maintenance of skills is a necessary component in helping at-risk students, diagnosis and remediation are also essential parts of teaching, especially when preparing students for passing the LPT (Flanagan, 1991).

Although remediation is helpful as well as necessary

for some students, several states concur in the belief that remedial efforts should not be looked on as long-term nor separate instructional areas. Rather, remedial efforts should be closely related to the objectives and intent of the regular instructional program. The major differences should be in the variety of approaches that are used in the process of remedying deficiencies. The focus should be on helping students learn prerequisite knowledge and skills related to the subject matter in which they are found deficient in an initial assessment.

MacIver's study (1992) found summer school classes to be effective remedial activities in English and mathematics courses during the middle grades. He also found that little research has been done to examine the impact of different compensatory or remedial approaches for these grades. However, Braddock (1993) conducted an analysis of impacts of different remedial programs on mathematics and reading achievements of students with the lowest previous report card grades going into eighth grade at public schools. His studies indicate that students who have fallen behind in mathematics or reading clearly benefit by attending extensive remedial programs. He recommends further research on remedial activities in the middle grades to discover conditions that can make extra help acceptable to early adolescents.

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Research specifically addressing interventional or remedial approaches of instructional techniques as effective methods of assisting low achieving at-risk students is limited, although there are some related studies.

Turner's (1972) research on a possible connection between a pupil's home or neighborhood background and the ability to retain reading skills indicate a significant link between socio-economic status and skill.

Smythe (1973) conducted two studies on second language retention over varying intervals. His first study in London, Ontario was undertaken to aid in determining the amount of loss in French skills students might suffer during summer vacation. His second study was undertaken to test the generalizability of the results of Study I and to examine the effects of additional variables. The variables are: (1) duration of time lapse between assessments, (2) grade of the student, and (3) retention scores across a broader range of experience with the language. He found that students showed a decline in their French reading comprehension competence after a break in instruction, but did not decline in their French listening comprehension competence. He also found an interaction between time lag and test sessions implying that summer months where

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no formal educational experience takes place does not have an interfering effect on retention. Retention loss did not happen from competition with other material in the memory.

Research by Kurtz in 1973 concerning how much fifth grade students retain of division skills learned in the previous grade found that there was a significant loss in ability over the summer, implying that either the skills were not well learned initially, or because skills were not reinforced within a shorter segment of time, they were not maintained.

Rude (1975) attempted to determine the degree to which first grade subjects retained reading ability over a summer vacation period and found significant losses on both measures of overall reading ability in vocabulary and comprehension implying young students would benefit from reinforcement of skills during vacation periods. However, Gastright's (1979) study of reading achievement gains for Title I students found that summer gains and losses are not predictable. The students in his study did not maintain the relative growth made during the school year.

Frederich and Walberg's (1980) study analyzed achievement with instructional time. They identified time in relationship to the number of instructional days

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in the classroom. Using data from all public schools in Philadelphia, regression equations were constructed. The data indicated that absences had a higher negative impact on student growth as the achievement level increased. Total days present had an effect across all income and achievement levels, although lateness affected high achievers more than low achievers. Days of instruction were more directly related to gains in achievement than to absolute achievement levels. They also found a correlation between time spent on content and achievement. An optimum number of instructional hours per week for mathematics achievement is three and one half hours.

Other research has made it apparent that continual reinforcement of skills benefits students in that they are better able to retain skills previously learned and then add to these skills. Handleman (1984) attempted to discover whether there are clear indications of performance loss when the retarded or autistic child is limited to a 180 day education. His findings showed a much higher level of performance on practiced versus unpracticed material and superior retention when skills were reviewed in periodic intervals, but skills learned are vulnerable to deterioration in the absence of instruction.

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Data from Barton's (1986) study conducted in Canada on individuals with severe handicaps suggest that students enrolled in summer programming gain an equivalent or greater amount of skills per amount of time as that gained during a regular school year. These students acquired skills that were additive to those acquired during the regular school year. The study determined also that students in the Chapter I program without an extended school year would not catch up to those who experienced an extended school year.

A study conducted by Wheeler in 1986 to determine the relationship between grade six test scores and the length of the school day imply that more time in science and math and a longer school day are associated with higher test scores.

Various studies on reading content and a summer program have been conducted. Arnold's (1986) study of disadvantaged Mexican-American children concluded that intensive oral-aural instruction helps some students retain reading skills during a summer vacation. Flanagan's (1991) study of students in grades five through eight, where seventy percent were in the bottom quartile on the ITBS on identical objectives as those measured on the LPT in mathematics, indicates the following trends. (1) Computational skills improved as

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students matured. (2) Conceptual and problem solving related development can not only fail to improve, but can also deteriorate. This study indicates time and maturity impact on student ability to pass the LPT.

#### Summary

The review of the literature has supported the need to explore the research question in the present study that has addressed the effectiveness of an intervention program in order to improve performance of low achieving students. Summer intervention programs to teach new skills and reinforce and maintain previously learned skills have been supported in this review. Some evidence has been collected to document the effectiveness for such programs. No significant evidence was found in any research specifically addressing intervention programs and the Literacy Passport Test. The present study was the first to address the impact of additional summer instruction on student scores and pass rates.

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## Chapter 3

### Methodology

#### Introduction

This chapter describes the research methodology used in this study. The purpose of this study was to determine whether a summer intervention program produced significantly greater improvement in performance of low achieving rising sixth graders who were compared with other low achieving rising sixth graders, who either volunteered for but did not receive intervention, and non-volunteers who also did not participate in the summer intervention program. Presented are descriptions of the research design, population sample, data collection, instrumentation, and analysis of data.

#### Research Design

This casual-comparative study was designed to determine whether there was a difference in achievement scores on the LPT between students who volunteered for and received additional instruction and those students who volunteered for but did not receive additional instruction. A secondary consideration of the study was

to determine whether there was a difference in achievement scores between students who volunteered for additional instruction and received it compared to students who neither volunteered for nor received additional intervention.

The study may be described as an ex post facto research design since the cause, the summer intervention program which was used to provide additional instruction, was examined after it presumably exerted its effect on the mean scores and pass rates of volunteers and non-volunteers (Borg & Gall, 1989). No manipulation having been conducted, populations were compared that are different on a critical variable, the summer program.

#### Population and Sample

The target population for this study was all rising sixth graders in the state of Virginia who scored in the bottom quartile on the Iowa Test of Basic Skills in fourth grade or prior to attaining sixth grade status, or who were determined through teacher recommendations to be at-risk. The accessible population was all rising sixth graders in the aforementioned category in a large urban school district in southeastern Virginia.

The sample included all students who were in need of remediation as determined by the Hampton City School Division based on two underlying assumptions. The first

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assumption utilized students' fourth grade ITBS scores in reading, writing and mathematics as valid indicators of students' future performance. Also used were Degrees of Reading Power Test as a predictor of reading and a writing prompt provided by the State Department of Education to predict student writing performance.

Cannaday (1989) stated that ITBS sub scores are a gross underestimator and therefore not reliable to predict the number of students who may fail the mathematics portion of the LPT. However, until a reliable math predictor test is designed, ITBS sub-scores continue to be used in this school division to help identify those students in need of an academic intervention program. The second assumption inferred that during the fifth grade, teachers of this same group of students would be able to identify those students who would be at risk of failing the LPT on their initial attempt in their sixth grade year.

The school division has 24 elementary schools (K-5), five middle schools (6-8), and four senior high schools (9-12). From the elementary school population, 559 students were identified as being at-risk of failing the LPT.

The students attending the summer intervention program were assigned to either a reading/writing

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combination class or a mathematics class. Their assignment to either class was dependent upon their greatest weakness. Students were unable to attend both classes although they may have been academically weak in several areas.

#### Data Collection

Parents of identified students were contacted in late spring of 1992. They were notified that based on their child's scores on standardized tests and teacher recommendation, their child would be afforded the opportunity to receive additional instruction in a summer program. Transportation to the program was provided by the school district at no cost to the parent (See Appendix A). Both parent and student were required to sign a contract prior to the child being enrolled in the program (See Appendix B).

From the number of parents who were contacted, 275 responded indicating a desire that their child participate in the program. Because of limited finances and other extenuating circumstances 192 students actually participated in the summer session. Fifty-six students did not receive summer instruction although there was an expressed desire to do so. The major reasons that some students were unable to receive additional instruction were (1) budgeting restraints of the school district and

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(2) personal factors limiting the students' availability during the time the program was offered.

The identified rising sixth graders were coded on a computer file maintained in the school district's office. Separate codes further divided those students into one of three categories: (1) volunteers who received intervention, (2) volunteers who did not receive intervention, (3) non-volunteers who did not receive intervention. Students volunteering for the program were assigned to their home middle school and randomly assigned to classes.

During the summer program only the instructional strategies of cooperative learning, computer assisted instruction, or direct teaching methods were utilized. However, during the regular school year, teachers utilize these and other instructional techniques as well as a combination of all three of the aforementioned methods.

In February, 1993, the Literacy Passport Test was administered to all sixth grade students in the district as well as those seventh and eighth grade students who had previously failed any part of the test. The LPT was also administered to any student in middle school who was new to the district and had not taken the test.

The LPTs were sent to and scored by an independent testing service and returned to the school district in

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May of 1993. The scores were then recorded in the central office computer file and copies were sent to students' home schools.

### Instrumentation

#### Iowa Test of Basic Skills

The Iowa Test of Basic Skills mandated by the State Department of Education under the Virginia State Assessment Program is an objective based measure used to:

- a. group students based on their individual strengths and weaknesses on specific behavioral objectives,
- b. ascertain development of students' general cognitive skills, and
- c. diagnose group strengths and weaknesses against some criterion measure

with high reliability (Conoley, 1989).

#### Literacy Passport Test

The Literacy Passport Test mandated by the State Department of Education under the Code of Virginia, as stated in the Standards of Quality, is a criterion-referenced standardized test used to measure skills in reading, writing, and mathematics. Students must pass all three portions of the test in order to be promoted to ninth grade and receive credits toward a standard diploma (Promotion, 1991).

A sub-test of the ITBS, Form H, Level 11 provided a measure of math performance for each student during the fifth grade to help teachers determine the needs of individual students for a summer school remediation program. Representatives of the Riverside Publishing Company indicated that the use of Form H, Level 11, would be an appropriate instrument given the five month interval between test administrations (Cannaday, 1989).

Predictor tests for reading and writing were used based on the assumption that they were valid and accurate indicators of students' future performance on those sections of the LPT. The Degrees of Reading Power Test was used for fifth grade students to predict student reading performance. A writing prompt developed by the State Department of Education provided predictive data concerning student performance (Virginia, 1992).

Each year a unique form of the DRP Test is developed for the Virginia Department of Education by Touchstone Applied Science Associates, Incorporated. Each untimed test form, administered in one session or sitting, contains 77 multiple-choice items measuring a student's ability to process or construct meaning while reading through a selection (Virginia, 1992).

A unique writing prompt developed by the Virginia Department of Education is designed to elicit a written

paper of personal expression from each student. It may involve writing a fictional or nonfictional narrative, directions, explanations, or other papers that discuss ideas or opinions. The untimed test, taken in one session, is scored on a student's ability to compose a message and present it stylistically in conventionally correct English. (Virginia, 1992).

#### Data Analysis

Data were analyzed using the non-parametric statistical test of chi-square ( $\chi^2$ ) to assess the nominal differences of pass/fail. The data were also analyzed using the analysis of variance (ANOVA) technique to determine whether the groups differed significantly among themselves on the variables being studied.

Levels of significance were set at the .05 level of confidence as suggested by Cook and Campbell (1979) as the standard to accept or reject the hypotheses for educational research. The compiled data were statistically analyzed by the SPSS 5.0 for PC and is presented in Chapter 4.

#### Ethical Safeguards

This research design is ethical in terms of providing data that were translated into meaningful statistical units that could be meaningfully interpreted. The study is ethical in terms of its use of human

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subjects. These procedures are in keeping with acceptable research practices of the Human Subjects Review Committee for the School of Education of the College of William and Mary. The subjects were those rising sixth grade students who scored in the bottom quartile on the ITBS and were identified by their fifth grade teachers as potentially at-risk, and all Title I students. These students and their parents signed a contract of commitment to the summer intervention program. The instructional content addressed was that which is included in Hampton City Schools' curriculum which coordinates with the State of Virginia's Literacy Passport Test.

The summer intervention program and the content taught was a part of the school division's strategy for preparing students for the LPT. The program and content were not structured nor redesigned for the purpose of contributing to this research.

The results of this study were made available to the school district administrators responsible for a viable remediation program for potential at-risk students. In reporting results, only statistical data were utilized. In no instances were the identity of any individual or an individual school identified, divulged, or reported.

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Summary

This study tested the effectiveness of a summer intervention program on improving the performance of low achieving rising sixth grade students. The target population consisted of sixth grade students who scored on the bottom quartile on the fourth grade ITBS, were identified as low performers by their fifth grade teachers, and were identified as at-risk of failing the LPT. Chi-square was used to test the statistical significance of pass/fail rates while ANOVA determined the level of statistical differentiation of the groups.

## Chapter 4

### Analysis of Results

#### Introduction

The purpose of this study was to evaluate the effectiveness of an intervention program for improving the performance of low achieving students on the Virginia Literacy Passport Test. Specifically, the study was designed to determine whether students who volunteered for additional instruction in a summer program performed significantly better than did students who did not receive additional instruction.

Student performance was measured by LPT scores in the three categories of reading, writing, and mathematics. The resultant data were analyzed by SPSS 5.0 for PC, using one-way measure of analysis of variance (ANOVA) to assess the results of interventional treatment. The design included the between-group factor of attendance identified as volunteerism, volunteerism without instruction, and non-volunteerism as the dependent variable, and students' scores as the independent variable. The ANOVA answered the question



of whether the volunteers who received instruction performed differently than those who volunteered for but did not receive instruction and those who neither volunteered nor received instruction. The .05 level of significance was applied to determine the effectiveness of the program.

Additionally, data were analyzed using chi square ( $\chi^2$ ) to determine whether there was a significant difference in the pass rate on the LPT among the groups in the three categories of reading, writing, and mathematics.

Initially 559 rising sixth grades students were identified as possibly at risk of failing the LPT. Of that number, 509 students remained at the completion of the study. Of this number 192 received instruction in either reading, writing, or mathematics. There were 56 remaining students who volunteered for but did not receive instruction and 261 remaining students who neither volunteered for nor received instruction. Twelve volunteer students, 15 volunteers without instruction, and 23 non-volunteers were lost through attrition. These numbers signify a 2% loss of volunteers, a 3% loss of volunteers without instruction, and a 4% loss of non-volunteers. Table 4.1 indicates mean scores of 254.38 in reading, 253.11 in writing, and 253.24 in

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mathematics for students receiving instruction. Mean scores for students who volunteered for but were unable to receive instruction are: reading 251.96, writing 252.46, and mathematics 252.77. Those students who neither volunteered for nor received instruction had mean scores of 251.66 in reading, 253.85 in writing, and 253.11 in mathematics.

The standard deviation for the volunteer group in reading was 13.54, in writing it was 17.00 and in mathematics it was 8.14. The volunteer group who did not receive instruction had a standard deviation of 13.62 in reading, 12.96 in writing, and 7.89 in mathematics. The standard deviation in reading for the group who neither volunteered for nor received instruction was 13.05, in writing it was 16.80, and in mathematics it was 8.29.

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Table 4.1

## MEASURE OF VARIABILITY

## Total Population

		Volunteers	Volunteers Without Instruction	Non- Volunteers
Number of Students		192	56	261
<u>Mean</u>	Reading	254.38	251.96	251.66
	Writing	253.11	252.46	253.85
	Mathematics	253.24	252.77	253.11
<u>Standard Deviation</u>	Reading	13.54	13.62	13.05
	Writing	17.00	12.96	16.80
	Mathematics	8.14	7.89	8.29

Data were also analyzed subdividing the volunteer group into subject area in which they received instruction during the summer program. The measure of variability in table 4.2 shows mean scores in reading of 251.88 for volunteers with a standard deviation of 12.58.

The mean score for volunteers in writing was 251.44 with a standard deviation of 14.45. Volunteers in mathematics had a mean score of 252.40 and a standard deviation of 7.28.

Table 4.2

## MEASURE OF VARIABILITY

## Subpopulation

		Volunteers	Volunteers Without Instruction	Non-Volunteers
		Volunteers	Volunteers	Volunteers
<u>Mean</u>	Reading	251.88	251.96	251.66
	Writing	251.44	252.46	253.85
	Mathematics	252.40	252.77	253.11
<u>Standard Deviation</u>	Reading	12.58	13.62	13.05
	Writing	14.45	12.96	16.80
	Mathematics	7.28	7.89	8.29

### Hypothesis 1

There will be a significant difference in the mean performance in the reading, writing, and mathematics sections of the LPT between the group who volunteered for and received additional summer instruction; the group who volunteered for, but did not receive additional instruction; and the group who did not seek nor receive additional instruction.

### Results of Hypothesis 1

The hypothesis stating a significant difference in the mean performance in the reading, writing, and mathematics sections of the LPT for all groups was rejected. Table 4.3 indicates that on the variable reading, an F-value of 2.57 and  $p = .054$  was obtained. This means that there was no significant difference in any of the attendance groups' mean performances for this variable.

According to Table 4.4, on the variable writing, an F-value of .422 and  $p = .737$  was obtained meaning that there is no significant difference in any of the attendance groups' mean performances for this variable. And on the variable mathematics, Table 4.5 shows that an F-value of 1.673 and  $p = .172$  was obtained in mathematics indicating that there was no significant difference in any of the groups' mean performances for this variable.

Table 4.3

## HYPOTHESIS 1

## ANALYSIS OF DIFFERENCE BETWEEN TREATMENT GROUPS ON LPT

Dependent Variable: Reading Scores

Source of Variation	Degree of Freedom	Sum of Squares	Mean Squares	F Ratio	F Prob
<u>Between Gps</u>	3	1360.772	53.591	2.570	.054
<u>Within Gps</u>	505	89145.613	176.526		
<u>Total</u>	508	90506.3851			

TABLE 4.4

## HYPOTHESIS 1

ANALYSIS OF DIFFERENCE BETWEEN TREATMENT GROUPS ON LPT

Dependent Variable: Writing Scores

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Source of Variation	Degree of Freedom	Sum of Squares	Mean Squares	F Ratio	F Prob
<hr/>					
<u>Between Gps</u>	3	346.020	115.340	.422	.737
<u>Within Gps</u>	505	137930.164	273.129		
<u>Total</u>	508	138276.1847			

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Table 4.5

## HYPOTHESIS 1

ANALYSIS OF DIFFERENCE BETWEEN TREATMENT GROUPS ON LPT

Dependent Variable: Mathematics Scores

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Source of Variation	Degree of Freedom	Sum of Squares	Mean Squares	F Ratio	F Prob
<u>Between Gps</u>	3	334.508	111.503	1.673	.172
<u>Within Gps</u>	505	33661.94	66.657		
<u>Total</u>	508	33996.4479			

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### Hypothesis 2

There will be a significant difference in the pass rate on the reading, writing, and mathematics sections of the LPT between the group who volunteered for and received additional summer instruction; the group who volunteered for, but did not receive additional instruction; and the group who did not seek nor receive additional instruction.

### Results of Hypothesis 2

To test the hypothesis that there would be a difference in the pass rates on the reading, writing, and mathematics sections of the LPT, a Two Tailed Chi-Square Test was used. This test compared the observed and expected rating frequencies which are recorded on Table 4.6 through Table 4.8. Of the 509 students remaining in the study, 135 volunteers, 34 volunteers without instruction, and 159 non-volunteers passed Reading. In Writing, 121 volunteers, 38 volunteers without instruction, and 164 non-volunteers passed. In mathematics there were 133 volunteers, 39 volunteers without instruction, and 174 non-volunteers who passed. The chi-square results indicate there was no significant difference of the nominal data with any variable and therefore the hypothesis was rejected.

Volunteers who receive instruction do not have a

higher pass rate in reading, writing, or mathematics than volunteers who do not receive interventional instruction nor do they have a higher pass rate then non-volunteers.

Table 4.6

## HYPOTHESIS 2

## CHI-SQUARE ANALYSIS OF PASS RATE ON THE LPT

Dependent Variable: Reading

	Volunteers	Volunteers Without Instruction	Non Volunteers
Pass	135 Students	34 Students	159 Students
	70%	61%	61%
Fail	57 Students	22 Students	102 Students
	30%	39%	39%

Chi-Square = 6.45132 (df = 3) p = .0916

Table 4.7

## HYPOTHESIS 2

## CHI-SQUARE ANALYSIS OF PASS RATE ON THE LPT

Dependent Variable: Writing

	Volunteers	Volunteers Without Instruction	Non-Volunteers
Pass	121 Students	38 Students	164 Students
	63%	68%	63%
Fail	71 Students	18 Students	97 Students
	37%	32%	37%

Chi-Square = .618277 (df = 3) p = .89224

Table 4.8

## HYPOTHESIS 2

## CHI-SQUARE ANALYSIS OF PASS RATE ON THE LPT

Dependent Variable: Mathematics

	Volunteers	Volunteers Without Instruction	Non-Volunteers
Pass	133 Students	39 Students	174 Students
	69%	70%	67%
Fail	59 Students	17 Students	87 Students
	31%	30%	33%

Chi-Square = 1.15026 (df = 3) p = .7649

Pass rates in reading, writing, and mathematics were computed. Seventy percent of the volunteers, sixty-one percent of the volunteers without instruction, and sixty-one percent of the non-volunteers passed reading. In writing, sixty-three percent of the volunteers, sixty-eight percent of the volunteers without instruction, and sixty-three percent of the non-volunteers passed. Of the volunteers in mathematics, sixty-nine percent passed, seventy percent of the volunteers without instruction passed, and sixty-seven percent of the non-volunteers passed.

These percentages suggest that volunteers achieve a higher pass rate than non-volunteers although not significantly higher. Student attitude may have an impact on achievement.

#### Summary

A one way analysis of variance to determine mean difference between groups and chi-square to test for homogeneity of variance indicated that students who volunteered for and received interventional instruction did not achieve significantly higher scores on any portion of the LPT than students who did not receive the additional instruction.

A one way analysis of variance to determine mean difference between groups and chi-square to test for

homogeneity of variance indicated that students who volunteered for but did not receive interventional instruction did not achieve significantly higher scores on any portion of the LPT than students who did not receive the additional instruction.



## Chapter 5

### Summary, Conclusions, and Recommendations

#### Introduction

This study examined the effectiveness of a summer intervention program for identified at-risk students who had the potential for failing Virginia's Literacy Passport Test. The Standards of Quality for Public Schools in Virginia require that students pass all three portions of the Literacy Passport Test (LPT) consisting of mathematics, reading, and writing (Literacy, 1992). The test has been administered since the 1989-90 school year. That year only sixth grade students were required to take the test and pass it as part of the Virginia State Assessment Program. In the succeeding years all sixth grade students have been required to take the LPT. Those who do not pass all portions of the test in Grade 6 are required to take any part of the test they do not pass the following year. All students are required by law to demonstrate proof they have passed the LPT prior to being classified as high school students who may earn credits toward a standard diploma.

Local school divisions are responsible to provide remediation programs for those students who are not successful in passing the LPT. The Hampton City School District has implemented a five week intervention - remediation summer program, not only for those students who have been unsuccessful in passing the LPT, but also for those identified students who appear to be at-risk of failing the test on their initial attempt. Students are identified as potentially at-risk if they are in a Title I category, have scored on the thirtieth percentile or below on any portion of the ITBS taken during fourth grade, or have been recommended by their fifth grade teacher as someone lacking minimum basic skills.

This study extends the previous research on the effectiveness of alternative instructional techniques and utilization of technology, namely computer assisted instruction, by examining the impact of a short term summer intervention program on LPT mean scores and pass rates. This chapter presents a summary, interprets the data collected, states conclusions, discusses implications, and suggests future research.

#### Methodology

The target population for this study included 559 rising sixth grade students who were identified through ITBS scores and teacher recommendations as being at-risk

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of not passing the LPT in the Spring of 1993. Students were categorized into three attendance groups based on response to a letter sent home to parents which offered an opportunity for their child to receive additional instruction during the summer. Responses or lack of responses indicated the categories students were assigned in this study. These categories are a) volunteers, those who participated in the summer program, b) volunteers without instruction, those who wanted to participate but were unable to receive instruction, and c) non-volunteers, those who chose not to enter the summer program.

The students attending the summer intervention program were assigned to either a reading/writing combination class or a mathematics class. Their assignment to either class was dependent upon their greatest weakness as evidenced by their ITBS scores. Students were unable to attend both classes although they may have been academically weak in several areas. Once identified as students in greatest need of either reading/writing or mathematics remediation, the students were randomly assigned to classes where teachers utilized one of the instructional techniques of direct teacher instruction, cooperative learning, or computer assisted instruction. Throughout the summer program of

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approximately 50 hours, the students remained with one designated teacher who provided one type of instructional strategy during the majority of the time.

### Findings

Analysis of variance (ANOVA) revealed that there were no differences among the three groups in mean performance in the reading, writing, and mathematics sections of the LPT. Students who volunteered for and received interventional instruction demonstrated no significant difference in their mean performance in reading, writing, or mathematics than either the students who volunteered for but did not receive instruction, and the students who neither volunteered for nor received instruction. The first hypothesis was rejected at the  $p < .05$  level.

Another analysis of variance was conducted to determine whether students who received instruction in either reading, writing, or mathematics demonstrated a significant difference in their mean performance in the corresponding portion of the LPT compared to those who did not receive interventional instruction on that portion of the test. There was no significant difference in mean performance in either reading, writing, or mathematics.

A two tailed test of chi-square was conducted on the

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second hypothesis which stated that there would be a difference in the pass rate on the reading, writing, and mathematics sections of the LPT between the groups. When pass rates for reading, writing, and mathematics were compared, students who volunteered for and received interventional instruction demonstrated no statistically significant difference from those who volunteered for but did not receive instruction, nor those who neither volunteered for nor received instruction. The second hypothesis was rejected since the chi-square computation showed no statistical significance.

Although the chi-square measure showed no significance, the computational rates indicate that those who volunteered for additional instruction showed a slight increase in the percentage of students who passed the LPT as opposed to those students who did not volunteer. Approximately 66% of the volunteer students' reading scores showed a pass rate compared to 61% of the non-volunteers. Writing scores showed 66% of the volunteer students passing the LPT while 63% of the non-volunteers passed. Mathematical scores indicate that 70% of the volunteer students and 67% of the non-volunteers passed the LPT. The findings indicate no statistical significance of the effectiveness of a summer intervention program, however, the conclusions and

discussion which follow should be reviewed in light of the following limitations.

#### Limitations of the Study

Although all of the students in the study were in one of five urban middle schools within a southeastern Virginia school district and a common curriculum was utilized, conclusions based on the results of this study must be approached with the knowledge that the researcher could not control for either the instruction or instructional techniques employed by the teachers of these students from the beginning of their sixth grade school year until the LPT was administered in February.

The data used to operationalize student achievement was limited to one LPT administered in the spring of 1993. Furthermore, students who volunteered for the intervention program were able to receive instruction in only one subject area during the short summer program.

#### Conclusions

From the analysis of results, major findings led to the following conclusions:

1. A short term summer intervention program did not have a significant effect on the mean scores of students who participated in the program. The program did not significantly increase their achievement on the LPT when compared to those who were unable or unwilling to attend
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the program.

2. A short term summer intervention program did not have a significant effect on the pass rate of students who participated in the program. The program did not significantly increase their achievement on the LPT when compared to those who were unable or unwilling to attend the program.

### Discussion

This study was designed to determine the effectiveness of a summer interventional program for low-achieving students. These students were considered to be at-risk of failing the LPT on their initial attempt based on three criteria.

The findings are perplexing in light of theoretical assumptions underlying the experimental treatment strategy and other conflicting research examining the effectiveness of summer programs. Studies that have been conducted show mixed and conflicting results. Some studies show summer programs to be effective for maintaining skills while others show summer programs to be ineffective. Some research states that skills are either not maintained, or lost during a long summer vacation, while other research, specifically Gastright's (1979), contradicts those. In a study of reading scores of Title I students, he found that students were unable

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to maintain the relative growth they had made and had unpredictable gains and losses.

However, MacIver's (1992) study found summer school classes to be effective for English and mathematics courses during the middle grades. Another study that demonstrated a need for summer classes, Kurtz's (1973) study involving fifth grade students, found that after a long summer vacation, students did not maintain skills in mathematics they had previously learned. A similar study by Rude (1975) concerning retention of previously learned skills during a lengthy period of no formal instruction showed significant losses in reading ability. And Arnold's (1968) study concluded that intensive oral-aural instruction helped some students retain reading skills during summer vacation.

This current study could not support the effectiveness of a summer school program. The findings are in agreement with Ascher (1988) who stated that recent research shows no significant educational benefits from providing summer schools. Her research included extended school years and year-round education which were also found to produce no significant results.

According to Ascher (1987), the most often used vehicle in helping students to successfully complete high school is to add-on programs. These add-on programs



supposedly make up for academic deficits and reduce summer losses thought to be greater among low-achieving students. But Asher stated there is little evidence that summer school programs are successful in reaching either of these goals.

Contrary to Asher's implication, Barton (1986), found that students' skills acquired during a summer program were additive to those skills acquired during the regular school year and thus help students in overcoming academic deficiencies. Although Asher (1988) has found summer programs to be ineffective, the State Department of Education in Virginia has mandated that school districts provide remediation for at-risk students and has included summer programs as one alternative.

The Department of Education had instructed school divisions to use the twenty-fifth percentile and lower scores on the ITBS administered in fourth grade as the benchmark for determining the need for remediation in mathematics. It was also suggested that the Degrees of Reading Power Test and the State Department writing prompt were accurate and valid indicators of future student performance on the respective sections of the literacy tests. However, Cannaday (1989) found that the ITBS was not a reliable predictor of future math performance and by randomly comparing both ITBS scores

and LPT scores of students who either passed or failed the LPT in spring, 1993, this researcher concurs. A cursory analysis of the data shows scores on the ITBS were inconsistent for both students who passed the LPT and those who did not.

A factor which may have impacted on the study is that according to Virginia State Department of Education statistics, public school students are continuing to improve in the pass rate on the LPT. The percentage of sixth grade students passing all three portions of the LPT between 1991-92 and 1992-93 school years increased by almost 6% (Shawgo, 1993). As a group, students who were in sixth grade during 1992-93 have higher pass rates than any group except one since the LPT's have been mandated. Therefore, other factors such as regular classroom instruction may have caused as much of an effect as the summer program.

A possible explanation of the slight advantage held by volunteers addresses the issue of the resolve to learn attributable to the student's effort and "I can" feelings as cited by Henker (1980). Those who volunteered for additional instruction wanted to acquire the knowledge they were lacking. In order to succeed they exhibited a willingness to exert extra effort to reach that goal.

Another possible factor which may have altered the

expected outcome of this study is the adequacy of teacher training prior to inclusion in the summer program. When the first summer passport program was developed, a group of eight teachers compiled a list of skills they deemed necessary for potential at-risk students to learn or review. They then devised an interdisciplinary curriculum to incorporate those skills. They agreed upon three instructional strategies which were used in the teaching of these children in the summer program. The following year, demand for the program grew and additional teachers were added. These teachers received some training, but had no input into the curriculum other than the selection of the instructional strategy they chose to employ and the subject they desired to teach. As Joyce (1992) stated, "teachers can be wonderful learners. They can master just about any kind of teaching strategy or implement any kind of sensible curriculum -- if the appropriate conditions are provided" (p 381). He also emphasizes that teachers must try a new strategy a dozen times or more before they begin to feel possession of the strategy and it becomes part of their natural repertoire. If teachers were attempting to use an instructional strategy they had not mastered, the effectiveness of their instruction would suffer.

Other research on the study of summer classes has

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made little mention of the impact of teachers or their training. Ascher (1988) suggested that teacher fatigue impacts on the effectiveness of instruction. She also states that a possible reason summer programs are ineffective is because teachers and students need time to become acclimated to one another and the physical plant before effective learning can take place. Teachers must get to know the needs of the students before they can provide instruction.

Another possible explanation as to why the data show no significant difference between those receiving additional instruction and those not receiving the instruction is the amount of instructional time allocated to the intervention program. The students in the study who attended classes received instruction approximately two and one-half hours per day for four days per week during a five week period. Perhaps more hours spent in instruction would have made a difference in achievement scores if the block of instruction during the school day or the length of the summer program would have been extended. Heyns (1978) suggested that there is variation in students' efforts over time. Students have spurts and hiatuses in learning; therefore, it is difficult to differentiate from the apparent results of different school schedules or the increased time spent in school.

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### Implications

The major findings of this study have practical implications for educators. Given the demands placed on school districts to provide remedial programs to improve student performance on the Literacy Passport Test, superintendents and their staff can draw support from this study to question their existing remediation programs and consider the possibility of re-allocating their funds. Administrators should consider selecting alternative criteria and predictor tests to identify potential at-risk students. And staff developers should plan for additional time for teachers to learn about and practice new instructional strategies.

The findings suggest a concurrence with Flanagan's (1991) study of students in grades five through eight. His study included students in mathematics in which 70% were in the bottom quartile on the ITBS. In his study and this study, the ITBS was given to students in grade four and used as a predictor of future performance. His study indicated that computational skills improved as students matured, implying that time and maturity impact on a student's ability to pass the LPT.

During a two year period between grades four and six, students also have the opportunity to experience various types of tests and learn test taking skills.

Through these experiences they become more capable test takers. Experience, therefore, adds another dimension to their abilities. Consequently, another implication of the study has been to question whether all low achieving rising sixth graders need an intervention program prior to taking the LPT.

Given the need for a continued remediation program, it might be reasonable to suggest that only those students who are newcomers to Virginia and in middle school, or those who have previously failed a portion of the LPT be given the opportunity to attend a remedial-interventional summer program.

#### Recommendations for Further Research

As a result of the analysis of the findings of this study, the following recommendations are suggested to provide additional and more conclusive information regarding the relative effectiveness of a summer remediation program.

1. Research conducted to investigate a longer term, i.e. a school year, of interventional instruction and its effectiveness on the performance of low achieving students. Through various funding sources some schools have various pull-out programs for students who have been unsuccessful in passing all sections of the LPT. The effectiveness of these programs should be researched as

well as any programs where students are assigned to a classroom whose curriculum is designed around intervention and remediation based on individual student weakness as shown by the LPT scores.

2. Programs for the remediation of students in grades seven and eight who have failed a portion of the LPT should be analyzed. Perhaps the programs are having no effect on helping the students pass the LPT.

3. Another area in which research might be fruitful would be to investigate elements of the effects of volunteerism and student attitude and its impact upon learning. Common sense tells us that those who want to learn should show greater achievement than those with laissez-faire attitudes.

4. A pre-test, post-test comparison study between volunteer groups and non-volunteer groups might provide additional insight into the duration of retention of skills. The pre-test should be administered immediately before the summer program. The post test should be administered during the first or second week of the regular school year to preclude instruction afforded students from their regular classroom teacher.

#### Summary

This study attempted to evaluate the effectiveness of a summer intervention program for identified students

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considered at-risk of failing the LPT. Although the population in this study was sufficient in size to ascertain statistical significance, analysis of variance found no significant difference in the mean performance between the groups. Likewise, chi square indicated no significant difference in the pass rate between the groups. While a greater percent of volunteers achieved passing scores on the LPT than did non-volunteers, it was not significant enough to consider the program effective.

Prior research studies addressing the effectiveness of summer programs are inconsistent and thus inconclusive. While some studies have found summer programs to be effective, others have not. Studies have been conducted in the subject areas of mathematics, reading, and language arts with students from first through tenth grade. Some of the studies have included Title I students, considering them most in need of additional instruction. Most of the studies have analyzed student achievement based upon their scores. Very few of the studies have considered other factors such as quality and quantity of instructional training for teachers, student attitude toward attending additional instructional days, and social adaptation of the student to the school, the teacher, and their peers. These factors should be controlled or examined in further



research on analyzing effectiveness of summer programs.

A further recommendation of research is to consider the effect of time and maturity on student achievement. Time should be considered in the context of aging as well as the number of hours, days, weeks, or months devoted to improving students' skills and abilities.

And finally, research should be conducted not only on the effectiveness of programs for student achievement, but on the types of tests educators use to determine whether, and how far students have progressed.

## **APPENDICES**

**APPENDIX A**

**TRANSPORTATION FORM**

## TRANSPORTATION

Transportation will be provided for those students that need it. Please check one of the following:

\_\_\_\_\_ I WILL BRING MY CHILD TO SCHOOL.

\_\_\_\_\_ MY CHILD WILL WALK TO SCHOOL.

\_\_\_\_\_ I WILL NEED TRANSPORTATION FOR MY CHILD.  
(IF YOU ANSWER YES TO THIS, PLEASE PROVIDE THE FOLLOWING INFORMATION)

STUDENT NAME: \_\_\_\_\_

SCHOOL: \_\_\_\_\_

ADDRESS PICK-UP \_\_\_\_\_

PHONE NUMBER (NIGHT) \_\_\_\_\_

(PHONE NUMBER MUST BE GIVEN SO THAT THE BUS DRIVER CAN  
CONTACT YOU OR NEIGHBOR WHEN AND WHERE THE BUS WILL PICK  
UP YOUR CHILD.)

**APPENDIX B**

**PARENT AND STUDENT CONTRACT**

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## PASSPORT TO SUCCESS

### PART I - (Student)

I, \_\_\_\_\_, agree to participate in the Summer Passport Program. As a student concerned about the school success, I will do the following:

- come to school everyday
- come to school prepared to do my best
- come to school prepared to follow the instructions of my teacher
- come to school prepared to get along with my classmates.

\_\_\_\_\_  
Signature of Student

### PART II (Parent)

I, \_\_\_\_\_, permit my child to attend the Summer Passport Program. As a parent concerned about my child's success in school, I will do the following:

- see that my child attends school everyday
- encourage my child to put forth his/her best effort in school
- encourage my child to listen to his/her teacher
- encourage my child to get along with his/her classmates
- show an interest in my child's work during the Summer Passport Program

I give permission for \_\_\_\_\_ to participate in the following activities during the Summer Passport Program:

- to attend field trips to local sites that pertain to instructional units
- to participate in interviews and testing to help determine the effects of the summer program on my child.

\_\_\_\_\_  
Signature of Parent

### PART III (School)

The Hampton City Schools agree to provide the Summer Passport Program for your child. We believe all students can learn and therefore we will provide learning experiences and activities designed to accomplish this goal. The Hampton City Schools are committed to providing school experiences which focus on student success.....because we care.

  
Signature of Superintendent

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